

**Consolidated Water Use Efficiency 2002 PSP
Proposal Part One:
A. Project Information Form**

1. Applying for (select one): ☒ (a) Prop 13 Urban Water Conservation Capital Outlay Grant
☐ (b) Prop 13 Agricultural Water Conservation Capital Outlay Feasibility Study Grant
☐ (c) DWR Water Use Efficiency Project
2. Principal applicant (Organization or affiliation): City of Port Hueneme
3. Project Title: Meter Install
4. Person authorized to sign and submit proposal:
- | | |
|-----------------|---|
| Name, title | Robert L Hunt, City Manager |
| Mailing address | 250 N. Ventura Road
Port Hueneme, CA 93041 |
| Telephone | 805-986-6501 |
| Fax. | 805-986-6581 |
| E-mail | rhunt@ci.port-hueneme.ca.us |
5. Contact person (if different):
- | | |
|------------------|---|
| Name, title. | <u>Douglas A. Breeze – Public Works Director</u> |
| Mailing address. | <u>250 N. Ventura Road, Port Hueneme, CA 93041</u> |
| Telephone | <u>805-986-6506</u> |
| Fax. | <u>805-986-6565</u> |
| E-mail | <u>Dbreeze@ci.port-hueneme.ca.us</u> |
6. Funds requested (dollar amount): \$2,000,000
7. Applicant funds pledged (dollar amount): \$1,830,000
8. Total project costs (dollar amount): \$3,830,000

Proposal Part One:
A. Project Information Form (continued)

10. Estimated annual amount of water to be saved (acre-feet):	+ 800
<hr/>	
Estimated total amount of water to be saved (acre-feet):	+ 8,000
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Over 10 years	
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Estimated benefits to be realized in terms of water quality, instream flow, other: Reduction in water use	
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11. Duration of project (month/year to month/year):	11/02-1/05
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12. State Assembly District where the project is to be conducted:	35,37 & 38
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13. State Senate District where the project is to be conducted:	18 & 19
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14. Congressional district(s) where the project is to be conducted:	23 & 24
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15. County where the project is to be conducted:	Ventura
<hr/>	
16. Date most recent Urban Water Management Plan submitted to the Department of Water Resources:	April/2002
<hr/>	
17. Type of applicant (select one):	<input checked="" type="checkbox"/> (a) city
Prop 13 Urban Grants and Prop 13	<input type="checkbox"/> (b) county
Agricultural Feasibility Study Grants:	<input type="checkbox"/> (c) city and county
	<input type="checkbox"/> (d) joint power authority
	<input type="checkbox"/> (e) other political subdivision of the State, including public water district
	<input type="checkbox"/> (f) incorporated mutual water company
DWR WUE Projects: the above	<input type="checkbox"/> (g) investor-owned utility
entities (a) through (f) or:	<input type="checkbox"/> (h) non-profit organization
	<input type="checkbox"/> (i) tribe
	<input type="checkbox"/> (j) university
	<input type="checkbox"/> (k) state agency
	<input type="checkbox"/> (l) federal agency

**Consolidated Water Use Efficiency 2002
PSP**

Proposal Part One:

A. Project Information Form (continued)

18. Project focus:

- ☐ (a) agricultural
X (b) urban

19. Project type (select one):
Prop 13 Urban Grant or Prop 13
Agricultural Feasibility Study Grant
capital outlay project related to:

- X (a) implementation of Urban Best
Management Practices
- ☐ (b) implementation of Agricultural Efficient
Water Management Practices
- ☐ (c) implementation of Quantifiable
Objectives (include QO number(s))
- ☐ (d) other (specify)

DWR WUE Project related to:

- X (e) implementation of Urban Best
Management Practices
- ☐ (f) implementation of Agricultural Efficient
Water Management Practices
- ☐ (g) implementation of Quantifiable
Objectives (include QO number(s))
- ☐ (h) innovative projects (initial
investigation of new technologies,
methodologies, approaches, or
institutional frameworks)
- ☐ (i) research or pilot projects
- ☐ (j) education or public information
programs
- ☐ (k) other (specify)

20. Do the actions in this proposal involve
physical changes in land use, or
potential future changes in land use?

- ☐ (a) yes
X (b) no

If yes, the applicant must complete the
CALFED PSP Land Use Checklist found at
http://calfed.water.ca.gov/environmental_docs.html
and submit it with the proposal.

Project Summary

The project is located in the City of Port Hueneme in Southern California. The City of Port Hueneme is a coastal community with a land area of 4½ miles and a population of 24,000. This city serves the West Coast's only U.S. Naval Construction Battalion (SEABEE), in addition to Channel Island Harbor, Oxnard Harbor, Ormund Beach, Mandalay Bay, communities of Silverstrand, Hollywood Beach, portions of the City of Oxnard and Port Hueneme Harbor.

A. Scope of Work: Relevance and Importance

The nature of this project is to install approximately 5,200 meters and 1,800 service lines. Currently, staff does not have the ability to account for water loss within the system; customers can use unlimited water quantities without paying more than the current flat rate. There is no incentive for customers to prevent or fix leaks. Meters provide direct tracking of water sales within different sections of the City. If there is a greater than acceptable variance between sales and production, this would indicate leaks. Once detected, they can be repaired.

The goals and objectives are to install water meters to City customers. By providing meters, it has been demonstrated by the American Water Works Association (AWWA) that demands will be reduced by 20-25%, or approximately 800 acre-feet per year at annual cost savings of at least \$284,800.

The City of Port Hueneme has a 5-year average historical demand of 3,100 acre-feet per year.

The critical local water issue is water quantity accountability, usage and waste.

The need for the project is directly tied to the major issues mentioned above. With an annual use of approximately 3,100-acre feet of water and a loss of approximately 800-acre feet, this 25% water loss is critical not only to Port Hueneme but also to Southern California. To avoid public waste of water and in order to determine leakage, water meters will be installed.

The expected outcomes will be 100% quantifiable water consumption/loss through the installation of 5,200 water meters and a reduction in water usage with associated savings.

Costs for the proposed project are expected to be +- \$3,830,000. Our grant request is \$2,000,000. The high cost is because areas within the City require the installation of service lines to residences. Parts of the City have service lines tied that feed multiple residences sharing a service line, and other parts have a service line that do not have meter boxes or isolation valves from the water main to the house.

Benefits will be the savings of approximately eight hundred (800) acre-feet of water per year once the meters are installed. This amounts to a savings of approximately \$285,000/year. Proper metering will enable us to more efficiently operate and monitor our system.

The proposal is consistent with local/regional management plans which includes the 5-year capital improvement plan.

B. Scope of Work-Technical/Scientific Merit, Feasibility, Monitoring and Assessment

1. The methods will include trenching, placement of water lines and meter installation. The City has approximately 5,200 customer accounts to be metered. Over a four-year period, that equates to approximately 1,300 per year, or 5.5 meters per workday. The City currently has about 1,700 meters installed, but not read; another 1,800 locations with meter jumpers installed instead of meters, and the last 1,700 require underground piping modifications, and new service lines to install meters.

2. Task list and schedule, deliverable items, due dates, project costs for each task, quarterly expenditure, start and completion dates of each task

Task & Items	Due Dates	Costs	Quarter	Start/End Date
#1	11-1/02		1st	11-1 to 11-1/03
Install 1,800 water service lines		\$1,600,000		
Admin./Const. mgmnt., records install		\$ 124,000		
Total		\$1,724,000		
#2	11-1/03		2nd	11-1 to 11-1/04
Install 1,700 Automatic meter readers (AMR)		\$ 930,000		
Admin./Const. mgmnt., records install		\$ 123,000		
Total		\$1,053,000		
#3	11-1/04		3rd	11-1 to 11-1/05
Install 1,700 Automatic meter readers (AMR)		\$ 930,000		
Admin./Const. mgmnt., records install		\$ 123,000		
Total		\$1,053,000		
Grand Total		*\$3,830,000		

*With 5,200 meters to install, we are willing to break the project into several segments depending upon the amount of funds available. Generally speaking, each meter (with associated labor and administration) costs approximately \$620 each. Installing 500 meters would cost about \$310,000. In an effort to stretch grant dollars, we would work with the 500 meter incremental install.

3. Monitoring and assessment, list of project-specific performance measures, how data will be handled and made available, list of expected products/outcomes

The City of Port Hueneme's staff and engineers will provide complete overview and inspection of work performed.

Project managers will review all final designs with city engineers and council as required. The project-specific performance measures will be timely initiation of tasks by a qualified contractor and their successful completion on due dates indicated in the budget. The actual data derived from the installed meters will be maintained in the city administrator's office and the public works department.

The expected outcome will be reliable water use data and reduction in water use.

4. Preliminary plans and specifications, certification that project is feasible

Plans and specifications are currently unavailable, but should be available within the next 3 months. As-built drawings exist, which will be utilized by the contractor to trench lines for the installation work. These drawings include angle meter stops where the new meters will be placed. No major engineering drawings are required.

It is anticipated that the City will first meter the parts of the City where service line replacements will be required. Because that area has the greatest chance of having ongoing leaks, it will provide the opportunity for the City to eliminate two issues at once.

Next, the City would install meters in parts of the City that have meter jumpers in place, then the City would initiate a change out program for the parts of the City that have meters, but are not currently being recorded.

The proposal is feasible and appropriate for the work intended due to the currently imposed flat rate water fee with unlimited use. With meters installed, the public will be more likely to conserve water.

C. Qualifications of the Applicants and Cooperators

1. Resume applicants (attached)
2. Role of external cooperators – These would be equipment suppliers and installers only. (Equipment specifications attached).

D. Benefits and Costs

1. Budget Breakdown and Justification

a.	Land Purchase/Easement	NA
b.	Planning/Design/Engineering	NA
c.	Materials/Installation	\$1,860,000
d.	Structures	NA
e.	Equipment Purchases/Rentals	NA
f.	Environmental Mitigation/Enhancement	NA
g.	Construction/Administration/Overhead	\$370,000
h.	Project/Legal/License Fees	NA
i.	Contingency (up to 15%, amount must be fully justified by applicant)	
j.	Other (Labor for service lines)	\$1,600,000

The costs for this project include the installation of 5,200 water meters with Automatic Meter Reading (AMR) equipment at a purchase and installation cost (including extensive trenching) of

approximately \$737 each. This includes Project administration, construction management, records updating and billing implementation.

2. Cost-Sharing (match)

The City anticipates providing in-kind services or a match of 50% of the total project cost which equals \$1.9 million. This would be accomplished using reserves and inter-fund loans to provide the necessary funding. The City will provide "In-kind" services for locating existing water services and providing inspection service to oversee the installation of materials.

3. Benefit Summary and Breakdown – list expected project outcomes

a. Quantify project outcomes and benefits

By providing meters, demands will be reduced by 20-25% or approximately 800 acre-feet per year at annual cost savings of at least \$285,000/year.

The City of Port Hueneme has a 5-year average historical demand of 3,100 acre-feet per year. The successful outcome will be the installation of 5,200 (AMR) equipment at a purchase and installation cost (including extensive trenching) of approximately \$737 each.

Additional benefits would be the dollar savings between manual meter reading and electronic meter reading. Manual meter reading costs \$60,000 per year as opposed to electronic meter reading at a cost of \$20,000 per year.

4. Assessment of Costs and Benefits

a. List and explain major analysis assumptions and methodologies

All assumptions are based on actual cost estimates from consulting engineers. Cost estimates and water quantities are actual figures received and recorded from water purveyor and accounting. Methodologies include trenching, securing meters to water lines and providing billing and accounting techniques recognized and acceptable to our accounting department.

b. Express benefits and costs in 2001 dollars.

<u>Item</u>	<u>Cost Benefit/Year</u>
Water Savings (800 ac. ft. @ \$356)	\$284,800
Improved meter reading	\$ 40,000

c. Convert all costs and benefits to present value equivalents

The costs would increase by approximately 4%/year, thus an annual savings of \$337,792.

- d. Table of present value, quantified costs and benefits for applicant and each beneficiary.

Item	(Annual)		Beneficiary
	Value	Benefits	
Water	800AC.FT.	\$284,800	City
*Water	800AC.FT	Redistribute	Purveyor
Improved meter reading	\$ 40,000	\$ 40,000/Yr.	City

- e. Demonstrate that it is locally cost effective

With an approximate annual savings of \$324,800 (excludes 4% annual increase), the city and Southern California will greatly benefit from the water savings and more accurate water costs will be passed on to the consumer. With the installation of the AMR equipment, laborious efforts are reduced, which conserves manpower, fuel and time.

E. Outreach, Community Involvement and Acceptance

Public Relations would be handled through a variety of different methods including the semi-annual "Hueneme Magazine", the "Ventura County Association of Water Agency's" quarterly news magazine, monthly bill stuffers, participation at local events such as "Hueneme Days", and "Harbor Days" celebrations.